## SEQUENCE LISTING

<110> Smith, Michael D.
 Potter, Robert J.
 Dhariwal, Gulshan
 Gerard, Gary F.
 Rosenthal, Kim



<120> Thermostable Reverse Transcriptases and Uses Thereof

<130> 0942.5040001/RWE/MTT

<140> US 09/845,157

<141> 2001-05-01

<150> US 60/207,196

<151> 2000-05-26

<160> 6

<170> PatentIn version 3.0

<210> 1

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<212> DNA

<213> Moloney-Murine Leukemia Virus

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		aca tgg ctg tct gat Thr Trp Leu Ser Asp 60	_
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_	-	tct acc ccc gtg tcc Ser Thr Pro Val Ser 90	
Tyr Pro Met Se		ctg ggg atc aag ccc Leu Gly Ile Lys Pro 105	_
		gta ccc tgc cag tcc Val Pro Cys Gln Ser 125	
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Gln Trp Tyr Th	-	aaa gat gcc ttt ttc Lys Asp Ala Phe Phe 185	
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		acc tgg acc aga ctc Thr Trp Thr Arg Leu 220	
•		gat gag gca ctg cgc Asp Glu Ala Leu Arg 235	
		gac ttg atc ctg cta Asp Leu Ile Leu Leu 250	
Asp Asp Leu Le		tct gag ctc gac tgc Ser Glu Leu Asp Cys 265	

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	_		_		act Thr	_	_		_							1008
					ttc Phe											1056
					tac Tyr											1104
			_		caa Gln	_	_			_		_				1152
					ctg Leu 390											1200
		_	_		aag Lys											1248
	_				cgt Arg		_									1296
					Gly											1344
	_	_	-		aag Lys	_	_	-								1392
	_		_	_	ccc Pro 470		-	_		_		-				1440
	_	_			tcc Ser		_		_				_	_	_	1488
	_	_	_	_	cgg Arg	_	_			_		_	_	_		1536
_	-		-		cca Pro	_			_		_	_			_	1584

	_		_	_	_	_								acg Thr	1632
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	_	_	_		_			_	_		***			gaa Glu	1824
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Met Thr Leu Asn Ile Glu Asp Glu Tyr Arg Leu His Glu Thr Ser Lys 35 40 45

Glu Pro Asp Val Ser Leu Gly Ser Thr Trp Leu Ser Asp Phe Pro Gln 50 55 60

Ala Trp Ala Glu Thr Gly Gly Met Gly Leu Ala Val Arg Gln Ala Pro 65 70 75 80

Leu Ile Ile Leu Lys Ala Thr Ser Thr Pro Val Ser Ile Lys Gln
85 90 95

Tyr Pro Met Ser Gln Glu Ala Arg Leu Gly Ile Lys Pro His Ile Gln 100 105 110

Arg Leu Leu Asp Gln Gly Ile Leu Val Pro Cys Gln Ser Pro Trp Asn 115 120 125

Thr Pro Leu Leu Pro Val Lys Lys Pro Gly Thr Asn Asp Tyr Arg Pro 130 135 140

Val Gln Asp Leu Arg Glu Val Asn Lys Arg Val Glu Asp Ile His Pro 145 150 155 160

Thr Val Pro Asn Pro Tyr Asn Leu Leu Ser Gly Leu Pro Pro Ser His
165 170 175

Gln Trp Tyr Thr Val Leu Asp Leu Lys Asp Ala Phe Phe Cys Leu Arg 180 185 190

Leu His Pro Thr Ser Gln Pro Leu Phe Ala Phe Glu Trp Arg Asp Pro 195 200 205

Glu Met Gly Ile Ser Gly Gln Leu Thr Trp Thr Arg Leu Pro Gln Gly 210 215 220

Phe Lys Asn Ser Pro Thr Leu Phe Asp Glu Ala Leu Arg Arg Asp Leu 225 230 235 240

Ala Asp Phe Arg Ile Gln His Pro Asp Leu Ile Leu Leu Gln Tyr Val 245 250 255

Asp Asp Leu Leu Ala Ala Thr Ser Glu Leu Asp Cys Gln Gln Gly 260 265 270

Thr Arg Ala Leu Leu Gln Thr Leu Gly Asp Leu Gly Tyr Arg Ala Ser 275 280 285

Ala Lys Lys Ala Gln Ile Cys Gln Lys Gln Val Lys Tyr Leu Gly Tyr 290 295 300

Leu Leu Lys Glu Gly Gln Arg Trp Leu Thr Glu Ala Arg Lys Glu Thr 305 310 315 320

Val Met Gly Gln Pro Thr Pro Lys Thr Pro Arg Gln Leu Arg Glu Phe 325 330 335

Leu Gly Thr Ala Gly Phe Cys Arg Leu Trp Ile Pro Gly Phe Ala Glu 340 345 350

Met Ala Ala Pro Leu Tyr Pro Leu Thr Lys Thr Gly Thr Leu Phe Asn 355 360 365

Trp Gly Pro Asp Gln Gln Lys Ala Tyr Gln Glu Ile Lys Gln Ala Leu 370 380

Leu Thr Ala Pro Ala Leu Gly Leu Pro Asp Leu Thr Lys Pro Phe Glu 385 390 395 400

Leu Phe Val Asp Glu Lys Gln Gly Tyr Ala Lys Gly Val Leu Thr Gln 405 410 415

Lys Leu Gly Pro Trp Arg Arg Pro Val Ala Tyr Leu Ser Lys Lys Leu 420 425 430

Asp Pro Val Ala Ala Gly Trp Pro Pro Cys Leu Arg Met Val Ala Ala 435 440 445

Ile Ala Val Leu Thr Lys Asp Ala Gly Lys Leu Thr Met Gly Gln Pro 450 460

Leu Val Ile Leu Ala Pro His Ala Val Glu Ala Leu Val Lys Gln Pro 465 470 475 480

Pro Asp Arg Trp Leu Ser Asn Ala Arg Met Thr His Tyr Gln Ala Leu 485 490 495

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Pro Ala Thr Leu Leu Pro Leu Pro Glu Glu Gly Leu Gln His Asn Cys 515 520 525

Leu Asp Ile Leu Ala Glu Ala His Gly Thr Arg Pro Asp Leu Thr Asp 530 540

Gln Pro Leu Pro Asp Ala Asp His Thr Trp Tyr Thr Gly Gly Ser Ser 545 550 550 560

Leu Leu Gln Glu Gly Gln Arg Lys Ala Gly Ala Ala Val Thr Thr Glu 565 570 575

Thr Glu Val Ile Trp Ala Lys Ala Leu Pro Ala Gly Thr Ser Ala Gln 580 585 590

Arg Ala Gln Leu Ile Ala Leu Thr Gln Ala Leu Arg Met Ala Glu Gly 595 600 605

Lys Lys Leu Asn Val Tyr Thr Asn Ser Arg Tyr Ala Phe Ala Thr Ala 610 620

His Ile His Gly Glu Ile Tyr Arg Arg Gly Leu Leu Thr Ser Glu 625 630 635 640

Gly Lys Glu Ile Lys Asn Lys Asp Glu Ile Leu Ala Leu Leu Lys Ala 650 655

Leu Phe Leu Pro Lys Arg Leu Ser Ile Ile His Cys Pro Gly His Gln 660 670

Lys Gly His Ser Ala Glu Ala Arg Gly Asn Arg Met Ala Asp Gln Ala 675 680 685

Ala Arg Lys Ala Ala Ile Thr Glu Asn Pro Asp Thr Ser Thr Leu Leu 690 700

Ile Glu Asn Ser Ser Pro Asn Ser Arg Leu Ile Asn 705 710 715

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<223> Oligonucleotide template

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